



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/080,495	02/22/2002	Pavel Koulik	16792-2	4693

7590 10/31/2005

Clifford W. Browning
Woodard, Emhardt, Naughton, Moriarty & McNett
Bank One Center/Tower, Suite 3700
111 Monument Circle
Indianapolis, IN 46204-5137

EXAMINER

CONLEY, SEAN EVERETT

ART UNIT	PAPER NUMBER
----------	--------------

1744

DATE MAILED: 10/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/080,495

Applicant(s)

KOULIK ET AL.

Examiner

Sean E. Conley

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 and 27-48 is/are pending in the application.
- 4a) Of the above claim(s) 1-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 27-48 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

This application contains claims directed to the following patentably distinct species of the claimed invention:

(i) – Device consisting of a plasma generation means and a vibration sensor arranged to measure vibrations of the object being treated during the plasma treatment process.

(ii) – Device consisting of a plasma generation means and a laser system with a sensor to measure the number of photons emitted during passage of the laser beam across the surface being treated.

(iii) – Device consisting of a plasma generation means and a liquid bath for immersion of the objects to be treated during plasma treatment.

(iv) – Device for generating a plasma consisting of an enclosure with a section housing objects to be treated as well as section with a piston chamber which compresses the process gas surrounding the object to a critical pressure in order to create a plasma.

(v) – Device for generating a plasma consisting of an enclosure with a section housing objects to be treated and a compression chamber wherein the sections are separated by a wall that can be removed or destroyed.

(vi) - Device consisting of a plasma generation means, a laser system with a sensor to measure the number of photons emitted during passage of the laser beam

Art Unit: 1744

across the surface being treated, and a vibration sensor arranged to measure vibrations of the object being treated during the plasma treatment process.

(vii) - Device consisting of a plasma generation means, a liquid bath for immersion of the objects to be treated during plasma treatment, and a vibration sensor arranged to measure vibrations of the object being treated during the plasma treatment process.

(viii) - Device for generating a plasma consisting of an enclosure with a section housing objects to be treated as well as section with a piston chamber which compresses the process gas surrounding the object to a critical pressure in order to create a plasma, and a vibration sensor arranged to measure vibrations of the object being treated during the plasma treatment process.

(ix) - Device for generating a plasma consisting of an enclosure with a section housing objects to be treated and a compression chamber wherein the sections are separated by a wall that can be removed or destroyed, and a vibration sensor arranged to measure vibrations of the object being treated during the plasma treatment process.

(x) - Device for generating a plasma consisting of a plasma generation means, a vibration sensor arranged to measure vibrations of the object being treated during the plasma treatment process, and a laser system with a sensor to measure the number of photons emitted during passage of the laser beam across the surface being treated.

(xi) - Device consisting of a plasma generation means, a liquid bath for immersion of the objects to be treated during plasma treatment, and a laser system with

Art Unit: 1744

a sensor to measure the number of photons emitted during passage of the laser beam across the surface being treated.

(xii) - Device consisting of an enclosure with a section housing objects to be treated as well as section with a piston chamber which compresses the process gas surrounding the object to a critical pressure in order to create a plasma, and a laser system with a sensor to measure the number of photons emitted during passage of the laser beam across the surface being treated.

(xiii) - Device for generating a plasma consisting of an enclosure with a section housing objects to be treated and a compression chamber wherein the sections are separated by a wall that can be removed or destroyed, and a laser system with a sensor to measure the number of photons emitted during passage of the laser beam across the surface being treated.

(xiv) – Device for generating a plasma consisting of a plasma generation means with an electric discharge electrode in the form of a conducting liquid jet directed against the wall of the object being treated.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, there appears to be no generic claim.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim

is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim

Art Unit: 1744

remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean E. Conley whose telephone number is 571-272-8414. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Kim can be reached on 571-272-1142. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SEC

K.E.C.
October 26, 2005

John Kim
JOHN KIM
SUPERVISORY PATENT EXAMINER